

=> S L12

L13 1 L12

=> d abs fbib hitstr

L13 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2009 ACS on STN

AB Extremely potent very late antigen-4 (VLA-4) antagonists with picomolar, whole blood activity and slow dissociation rates were discovered by incorporating an amino substituent on the proline fragment of the initial lead structure. This level of potency against the unactivated form of VLA-4 was shown to be sufficient to overcome the poor pharmacokinetic profiles typical of this class of VLA-4 antagonists, and sustained activity as measured by receptor occupancy was achieved in preclin. species after oral dosing.

AN 2009:591429 CAPLUS

DN 151:48494

TI Discovery of N-{N-[(3-Cyanophenyl)sulfonyl]-4(R)-cyclobutylamino-(L)-prolyl}-4-[(3',5'-dichloroisonicotinoyl)amino]-(L)-phenylalanine (MK-0668), an Extremely Potent and Orally Active Antagonist of Very Late Antigen-4

AU Lin, Linus S.; Lanza, Thomas; Jewell, James P.; Liu, Ping; Jones, Carrie; Kieczkowski, Gerard R.; Treonze, Kelly; Si, Qian; Manior, Salony; Koo, Gloria; Tong, Xinchun; Wang, Junying; Schuelke, Anne; Pivnichny, James; Wang, Regina; Raab, Conrad; Vincent, Stella; Davies, Philip; MacCoss, Malcolm; Mumford, Richard A.; Hagmann, William K.

CS Departments of Medicinal Chemistry, Immunology and Rheumatology and Drug Metabolism, Merck Research Laboratories, Rahway, NJ, 07065, USA

SO Journal of Medicinal Chemistry (2009), 52(11), 3449-3452

CODEN: JMCMAR; ISSN: 0022-2623

PB American Chemical Society

DT Journal

LA English

IT 1160824-72-5P

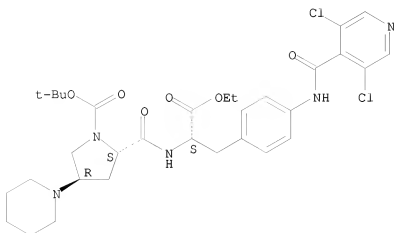
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(oral VLA-4 antagonists preparation)

RN 1160824-72-5 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

Absolute stereochemistry.



RE.CNT 3      THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 12:11:23 ON 28 JUL 2009)

FILE 'REGISTRY' ENTERED AT 12:11:42 ON 28 JUL 2009

L1                STRUCTURE UPLOADED  
L2                32 S L1  
L3                27820 S L1 FUL

FILE 'REGISTRY' ENTERED AT 12:13:09 ON 28 JUL 2009

L4                STRUCTURE UPLOADED  
L5                3981 S L4 FUL  
L6                STRUCTURE UPLOADED  
L7                0 S L6  
L8                18 S L6 FUL

FILE 'REGISTRY' ENTERED AT 12:16:53 ON 28 JUL 2009

L9                STRUCTURE UPLOADED  
L10               0 S L9  
L11               3 S L9 FUL

FILE 'REGISTRY' ENTERED AT 12:19:31 ON 28 JUL 2009

SET TERMSET E#  
DEL SEL Y  
SEL L11 3 RN  
L12               1 S E1/RN  
SET TERMSET LOGIN

FILE 'CAPLUS' ENTERED AT 12:19:43 ON 28 JUL 2009

L13               1 S L12

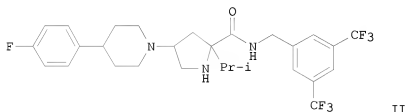
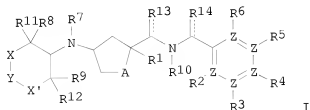
=> s 18

L14               2 L8

=> s 114 not 113  
L15 2 L14 NOT L13

=> d abs fbib hitstr 1-2

L15 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2009 ACS on SIN  
GI



AB The invention relates to amino heterocyclic compds., e.g., I [Z is C or N, where no more than three Z are N; A is O, NH or substituted imino, S, SO, SO<sub>2</sub>; Y is any group given for A, acylalkyl, CO, etc.; X, X' are independently null or (un)substituted methylene or ethylene; R1-R9 are (un)substituted alkyl; R10 is H, Ph, (un)substituted alkyl; R11, R12 are independently H, acyl, OH, (un)substituted alkyl; R13, R14 are independently :O, H, Ph, (un)substituted alkyl (some of the R groups may combine to form rings)] and their pharmaceutically-acceptable salts and individual diastereomers, which are modulators of chemokine receptor activity and are useful in the prevention and treatment of inflammatory, immunoregulatory, and other diseases. Thus, compound II (two isomers) was prepared by a multistep procedure starting with the reaction of N-(tert-butoxycarbonyl)-L-valine Me ester with 3-chloro-2-(chloromethyl)-1-propene.

AN 2005:962240 CAPLUS

DN 143:230188

TI Preparation of aminoprolinamide derivatives and related amino heterocycles as modulators of chemokine receptor activity

IN Yang, Lihu; Pasternak, Alexander; Mills, Sander G.

PA Merck & Co., Inc., USA

SO PCT Int. Appl., 100 pp.

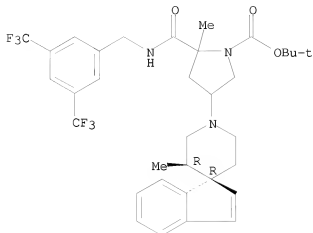
CODEN: PIXXD2

DT Patent

LA English  
FAN.CNT 1

|    | PATENT NO.  | KIND | DATE     | APPLICATION NO.  | DATE       |
|----|---|------|----------|------------------|------------|
| PI | WO 2005080371   | A1   | 20050901 | WO 2005-US3849   | 20050208   |
|    | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW |      |          |                  |            |
|    | RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  |      |          |                  |            |
|    | AU 2005214319   | A1   | 20050901 | US 2004-544763P  | P 20040212 |
|    | AU 2005214319   | B2   | 20090219 | AU 2005-214319   | 20050208   |
|    |   |      |          | US 2004-544763P  | P 20040212 |
|    |   |      |          | WO 2005-US3849   | W 20050208 |
|    | CA 2555073  | A1   | 20050901 | CA 2005-2555073  | 20050208   |
|    |   |      |          | US 2004-544763P  | P 20040212 |
|    |   |      |          | WO 2005-US3849   | W 20050208 |
|    | EP 1716134  | A1   | 20061102 | EP 2005-722806   | 20050208   |
|    | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS   |      |          |                  |            |
|    |   |      |          | US 2004-544763P  | P 20040212 |
|    |   |      |          | WO 2005-US3849   | W 20050208 |
|    | CN 1918145  | A    | 20070221 | CN 2005-80004643 | 20050208   |
|    |   |      |          | US 2004-544763P  | P 20040212 |
|    |   |      |          | WO 2005-US3849   | W 20050208 |
|    | JP 2007522219   | T    | 20070809 | JP 2006-553179   | 20050208   |
|    |   |      |          | US 2004-544763P  | P 20040212 |
|    |   |      |          | WO 2005-US3849   | W 20050208 |
|    | IN 2006DN04625  | A    | 20070824 | IN 2006-DN4625   | 20060810   |
|    |   |      |          | US 2004-544763P  | P 20040212 |
|    |   |      |          | WO 2005-US3849   | W 20050208 |
|    | US 20070149529  | A1   | 20070628 | US 2006-589406   | 20060811   |
|    |   |      |          | US 2004-544763P  | P 20040212 |
|    |   |      |          | WO 2005-US3849   | W 20050208 |
| OS | CASREACT 143:230188; MARPAT 143:230188  |      |          |                  |            |
| IT | 862997-55-5P 862997-61-3P 862997-62-4P  |      |          |                  |            |
|    | 862997-63-5P  |      |          |                  |            |
|    | RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  |      |          |                  |            |
|    | (preparation of aminoprolinamide derivs. and related amino heterocycles as modulators of chemokine receptor activity)   |      |          |                  |            |
| RN | 862997-55-5 CAPLUS  |      |          |                  |            |
| CN | 1-Pyrrolidinecarboxylic acid, 2-[[[3,5-bis(trifluoromethyl)phenyl]methyl]amino]carbonyl]-2-methyl-4-[(1R,3'R)-3'-methylspiro[1H-indene-1,4'-piperidin]-1'-yl]-, 1,1-dimethylethyl ester (CA INDEX NAME)   |      |          |                  |            |

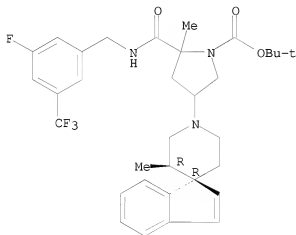
Absolute stereochemistry.



RN 862997-61-3 CAPLUS

CN 1-Pyrrolidinecarboxylic acid, 2-[[[3-fluoro-5-(trifluoromethyl)phenyl]methyl]amino]carbonyl]-2-methyl-4-[(1R,3'R)-3'-methylspiro[1H-indene-1,4'-piperidin]-1'-yl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

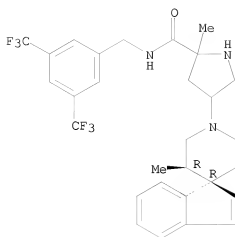
Absolute stereochemistry.



RN 862997-62-4 CAPLUS

CN 2-Pyrrolidinecarboxamide, N-[[[3,5-bis(trifluoromethyl)phenyl]methyl]-2-methyl-4-[(1R,3'R)-3'-methylspiro[1H-indene-1,4'-piperidin]-1'-yl]-, hydrochloride (1:1) (CA INDEX NAME)

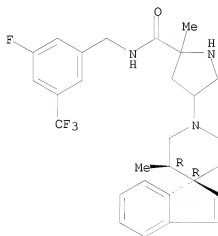
Absolute stereochemistry.



● HCl

RN 862997-63-5 CAPLUS  
 CN 2-Pyrrolidinecarboxamide, N-[[3-fluoro-5-(trifluoromethyl)phenyl]methyl]-2-methyl-4-[(1R,3'R)-3'-methylspiro[1H-indene-1,4'-piperidin]-1'-yl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

|    |              |              |              |
|----|--------------|--------------|--------------|
| IT | 862997-29-3P | 862997-33-9P | 862997-51-1P |
|    | 862997-64-6P | 862997-65-7P | 862997-66-8P |
|    | 862997-68-0P | 862997-69-1P | 862997-82-8P |

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of aminoprolinamide derivs. and related amino heterocycles as modulators of chemokine receptor activity)

RN 862997-29-3 CAPLUS

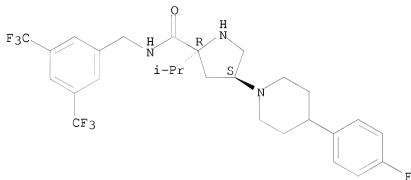
CN 2-Pyrrolidinecarboxamide, N-[[3,5-bis(trifluoromethyl)phenyl]methyl]-4-[4-(4-fluorophenyl)-1-piperidinyl]-2-(1-methylethyl)-, (2R,4S)-rel-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 862997-28-2

CMF C28 H32 F7 N3 O

Relative stereochemistry.



CM 2

CRN 76-05-1

CMF C2 H F3 O2



RN 862997-33-9 CAPLUS

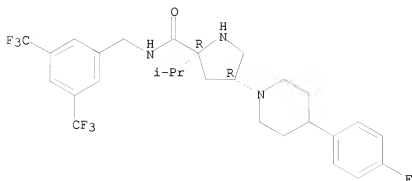
CN 2-Pyrrolidinecarboxamide, N-[[3,5-bis(trifluoromethyl)phenyl]methyl]-4-[4-(4-fluorophenyl)-1-piperidinyl]-2-(1-methylethyl)-, (2R,4R)-rel-, 2,2,2-trifluoroacetate (1:2) (CA INDEX NAME)

CM 1

CRN 862997-32-8

CMF C28 H32 F7 N3 O

Relative stereochemistry.



CM 2

CRN 76-05-1

CMF C2 H F3 O2

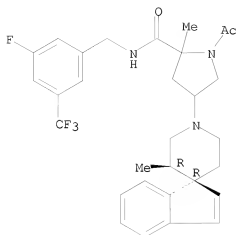


RN 862997-51-1 CAPLUS

CN Pentonamide, 2,5-anhydro-N-[[3,5-bis(trifluoromethyl)phenyl]methyl]-3,4-dideoxy-4-spiro[1H-indene-1,4'-piperidin]-1'-yl-2-C-phenyl- (9CI) (CA INDEX NAME)

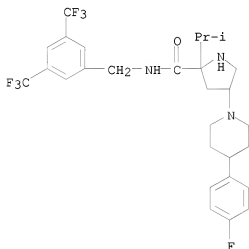






RN 862997-66-8 CAPLUS

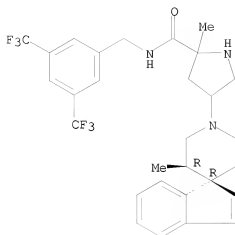
CN 2-Pyrrolidinecarboxamide, N-[[3,5-bis(trifluoromethyl)phenyl]methyl]-4-[[4-(4-fluorophenyl)-1-piperidinyl]-2-(1-methylethyl)- (CA INDEX NAME)



RN 862997-68-0 CAPLUS

CN 2-Pyrrolidinecarboxamide, N-[[3,5-bis(trifluoromethyl)phenyl]methyl]-2-methyl-4-[(1R,3'R)-3'-methylspiro[1H-indene-1,4'-piperidin]-1'-yl]- (CA INDEX NAME)

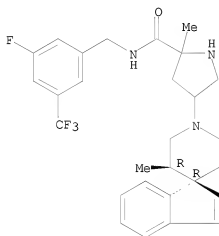
Absolute stereochemistry.



RN 862997-69-1 CAPLUS

CN 2-Pyrrolidinecarboxamide, N-[[[3-fluoro-5-(trifluoromethyl)phenyl]methyl]-2-methyl-4-[(1R,3'R)-3'-methylspiro[1H-indene-1,4'-piperidin]-1'-yl]- (CA INDEX NAME)

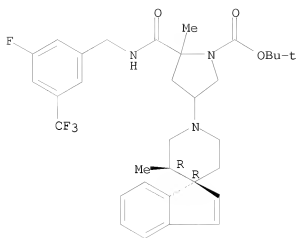
Absolute stereochemistry.



RN 862997-82-8 CAPLUS

CN 1-Pyrrolidinecarboxylic acid, 2-[[[3-fluoro-5-(trifluoromethyl)phenyl]methyl]amino]carbonyl]-2-methyl-4-[(1R,3'R)-3'-methylspiro[1H-indene-1,4'-piperidin]-1'-yl]-, 1,1-dimethylethyl ester, hydrochloride (1:1) (CA INDEX NAME)

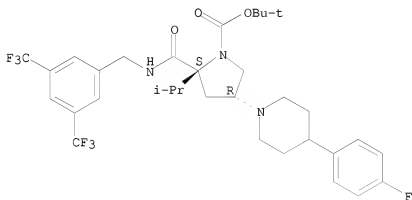
Absolute stereochemistry.



● HCl

IT 862997-39-5P 862997-40-8P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation of aminoprolinamide derivs. and related amino heterocycles as  
 modulators of chemokine receptor activity)  
 RN 862997-39-5 CAPLUS  
 CN 1-Pyrrolidinecarboxylic acid, 2-[[[3,5-  
 bis(trifluoromethyl)phenyl]methyl]amino]carbonyl]-4-[4-(4-fluorophenyl)-1-  
 piperidinyl]-2-(1-methylethyl)-, 1,1-dimethylethyl ester, (2R,4S)-rel-  
 (CA INDEX NAME)

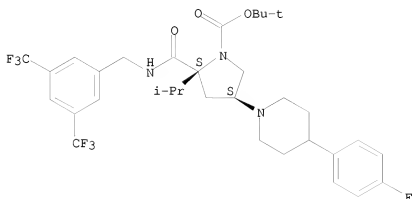
Relative stereochemistry.



RN 862997-40-8 CAPLUS  
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 piperidinyl]-2-(1-methylethyl)-, 1,1-dimethylethyl ester, (2R,4R)-rel-

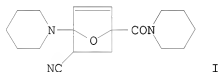
(CA INDEX NAME)

Relative stereochemistry.



OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)  
 RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2009 ACS on STN  
 GI



I

AB The scope of cycloaddn. reaction of various dienophiles with  
 5-amino-2-furancarboxamides has been studied. CH<sub>2</sub>:CHCN reacts with  
 5-piperidino-2-furancarboxamides, e.g. I, to yield the expected cycloaddn.  
 products. Several other dienophiles were unreactive.

AN 1990:198001 CAPLUS

DN 112:198001

OREF 112:33465a,33468a

TI Chemistry of furan. Part VII. Diels-Alder reaction on substituted  
 furanamides

AU Rai, Usha Kumari; Shanker, Birja; Singh, Sujana; Rao, R. Balaji

CS Dep. Chem., Banaras Hindu Univ., Varanasi, 221 005, India

SO Indian Journal of Chemistry, Section B: Organic Chemistry Including  
 Medicinal Chemistry (1989), 28B(10), 870-1

CODEN: IJSBDB; ISSN: 0376-4699

DT Journal

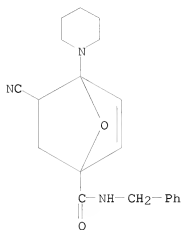
LA English

OS CASREACT 112:198001

IT 126774-31-0P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

RN 126774-31-0 CAPLUS

CN 7-Oxabicyclo[2.2.1]hept-2-ene-1-carboxamide,  
5-cyano-N-(phenylmethyl)-4-(1-piperidiny)- (CA INDEX NAME)

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)